

**WHAT IS CLAIMED IS:**

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1. A method for providing access to a network system, wherein the network system includes a plurality of access points coupled to a network, the method comprising:

5 a first access point receiving identification information from a portable computing device, wherein the identification information indicates a network provider of a plurality of possible network providers;

determining the network provider for the portable computing device after receiving the identification information;

10 the first access point receiving data from the portable computing device;

providing network access to the portable computing device through the network provider determined in said determining.

2. The method of claim 1, wherein said providing network access comprises  
15 providing the data received from the portable computing device to a destination based on the determined network provider.

3. The method of claim 1, wherein the network system is useable by  
20 subscribers of each of the plurality of possible network providers.

4. The method of claim 1, further comprising:  
maintaining and storing a usage amount by the portable computing device;  
wherein the determined network provider charges for access by the portable  
computing device to the network.

25 5. The method of claim 1, wherein the network system includes a memory medium which stores a data structure comprising a list of identification information and a corresponding list of the plurality of possible network providers;

wherein said determining the network provider for the portable computing device includes accessing the memory medium and using the received identification information to determine the network provider.

5           6.       The method of claim 1, wherein the network system includes a memory medium which stores a data structure comprising a list of identification information, a corresponding list of the plurality of possible network providers, and associated methods for providing data to the respective plurality of possible network providers;

              wherein said determining the network provider for the portable computing device  
10 includes accessing the memory medium, using the received identification information to determine the network provider, and using an associated method for providing the data to the network provider.

              7.       The method of claim 6, wherein the data structure stores a destination  
15 address indicating a destination specified by the network provider;

              wherein said providing the data comprises providing the data to the destination specified by the network provider.

              8.       The method of claim 1, wherein the plurality of access points are  
20 maintained by a first network provider;

              wherein the identification information indicates a second network provider.

              9.       The method of claim 1, wherein the identification information comprises a  
System ID of the portable computing device, wherein the System ID uniquely identifies  
25 the network provider of the plurality of possible network providers.

              10.      The method of claim 1, further comprising:

the first access point receiving identification information from a portable computing device, wherein the identification information indicates a first network provider of the plurality of possible network providers;

5 determining the first network provider for the portable computing device after receiving the identification information;

the first access point receiving data from the portable computing device;

providing the data received from the portable computing device to a destination associated with the first network provider;

10 the first access point receiving identification information from a portable computing device, wherein the identification information indicates a second network provider of the plurality of possible network providers;

determining the second network provider for the portable computing device after receiving the identification information;

the first access point receiving data from the portable computing device; and

15 providing the data received from the portable computing device to a destination associated with the second network provider.

11. The method of claim 1,

20 wherein the plurality of access points are arranged at known locations in a geographic region, the method further comprising:

the first access point providing geographic location information indicating a known geographic location of the portable computing device;

25 wherein said providing network access comprises selectively providing network access to the portable computing device based on the known geographic location of the portable computing device.

12. The method of claim 1, further comprising:

determining an access level for the portable computing device after receiving the identification information;

the first access point receiving data from the portable computing device; and  
providing the data received from the portable computing device to a destination  
based on the determined access level.

5           13.     The method of claim 12, wherein said providing the data comprises:  
providing the data to one or more resources on the network to allow the portable  
computing device access to the one or more resources on the network if the access level is  
a first access level;

10           providing the data to a destination for external access out of the network to only  
allow the portable computing device access to other networks if the access level is a  
second access level;

wherein, if the access level is the second access level, the data is not provided to  
the one or more resources on the network.

15           14.     The method of claim 1, wherein the first access point communicates with  
the portable computing device in a wireless fashion.

20           15.     The method of claim 14, further comprising:  
assigning a wireless communication channel for communication between the first  
access point and the portable computing device.

25           16.     The method of claim 15, wherein the first access point assigns the wireless  
communication channel for communication between the first access point and the  
portable computing device.

17.     The method of claim 15, wherein said assigning comprises assigning the  
wireless communication channel based on the identification information received from  
the portable computing device.

18. The method of claim 15, wherein said assigning comprises assigning the wireless communication channel based on the determined network provider.

19. The method of claim 14, further comprising:  
5 determining an access level for the portable computing device after receiving the identification information; and  
assigning a wireless communication channel for communication between the first access point and the portable computing device based on the determined access level.

B 10 20. The method of claim 1, wherein the first access point communicates with the portable computing device in a wired fashion.

15 21. A network system, comprising:  
a network;  
a plurality of access points coupled to the network, wherein each of the plurality of access points is operable to communicate with a portable computing device, wherein each of the plurality of access points is configured to receive identification information  
20 from the portable computing device indicating a network provider of a plurality of possible network providers;

wherein each of the plurality of access points is operable to determine the network provider indicated in the identification information;

25 wherein network access is provided to the portable computing device through the determined network provider.

22. The network system of claim 21, wherein each of the plurality of access points is operable to provide data received from the portable computing device to a destination based on the determined network provider.

23. The network system of claim 21, wherein the network system is useable by subscribers of each of the plurality of possible network providers.

5 24. The network system of claim 21, wherein the determined network provider charges for access by the portable computing device to the network.

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25. The network system of claim 21, further comprising:  
a memory medium coupled to the network which stores a data structure  
10 comprising a list of identification information and a corresponding list of the plurality of possible network providers;

wherein, in determining the network provider for the portable computing device, each of the plurality of access points is operable to access the memory medium and use the received identification information to determine the network provider.

15 26. The network system of claim 25, wherein the memory medium is comprised in one or more of the access points.

27. The network system of claim 21, further comprising:  
20 a memory medium coupled to the network which stores a data structure comprising a list of network provider identification information, a corresponding list of the plurality of possible network providers, and associated methods for providing data to the respective plurality of possible network providers;

wherein, in determining the network provider for the portable computing device,  
25 each of the plurality of access points is operable to access the memory medium, use the received network provider identification information to determine the network provider, and use an associated method for providing the data to the determined network provider.

28. The network system of claim 27, wherein the memory medium is comprised in one or more of the access points.

29. The network system of claim 27,  
5 wherein the data structure stores a destination address indicating a destination specified by the determined network provider;

wherein each of the plurality of access points is operable to provide the data to the destination specified by the determined network provider.

30. The network system of claim 21, wherein the plurality of access points are maintained by a first network provider;

wherein the identification information indicates a second network provider.

31. The network system of claim 21, wherein the identification information  
15 comprises a System ID of the portable computing device, wherein the System ID uniquely identifies a network provider of the plurality of possible network providers.

32. The network system of claim 21, further comprising:  
a portable computing device operated by a user, wherein the portable computing  
20 device includes the identification information, wherein the identification information indicates a first network provider of the plurality of network providers;

wherein, when a first access point of the plurality of access points receives the identification information from the portable computing device, the first access point is operable to determine the first network provider;

25 wherein the first access point is operable to provide data received from the portable computing device according to the first network provider.

33. The network system of claim 21, further comprising:

one or more network devices coupled to the network, wherein each of the one or more network devices corresponds to one of the plurality of possible network providers.

wherein each of the plurality of access points is operable to provide data received from the portable computing device to a network device corresponding to the determined  
5 network provider.

34. The network system of claim 21, wherein each of the plurality of access points is operable to provide the data to the destination in a secure manner.

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10 35. The network system of claim 21, wherein the plurality of access points are arranged at known locations in a geographic region, wherein each access point is operable to provide geographic location information indicating a known geographic location of the portable computing device;

wherein network access is selectively provided to the portable computing device  
15 based on the known geographic location of the portable computing device.

36. The network system of claim 21, wherein one or more of the plurality of access points are operable to:

determine an access level for the portable computing device after receiving the  
20 identification information; and

provide data received from the portable computing device to a destination based on the determined access level.

37. The network system of claim 36, wherein, in providing the data, said one  
25 or more of the plurality of access points are operable to:

provide the data to one or more resources on the network to allow the portable computing device access to the one or more resources on the network if the access level is a first access level;



provide the data to a destination for external access out of the network to only allow the portable computing device access to other networks if the access level is a second access level;

wherein, if the access level is the second access level, the data is not provided to the one or more resources on the network.

38. The network system of claim 21, wherein at least a subset of the plurality of access points are wireless access points operable to communicate with the portable computing device in a wireless fashion.

39. The network system of claim 38, wherein each of the wireless access points is operable to assign a wireless communication channel for communication between the first access point and the portable computing device.

40. The network system of claim 39, wherein one or more of the wireless access points are operable to assign the wireless communication channel based on the identification information received from the portable computing device.

41. The network system of claim 39, wherein one or more of the wireless access points is operable to assign the wireless communication channel based on the determined network provider.

42. The network system of claim 38, further comprising:  
wherein one or more of the wireless access points are operable to determine an access level for the portable computing device after receiving the identification information; and

wherein said one or more of the wireless access points are operable to assign a wireless communication channel for communication between the first access point and the portable computing device based on the determined access level.

43. The network system of claim 21, wherein at least a subset of the plurality of access points are operable to communicate with the portable computing device in a wired fashion.

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44. A method for providing roaming features on a wireless network system, wherein the wireless network system includes a plurality of access points coupled to a network, the method comprising:

a first access point receiving identification information from a portable computing device in a wireless manner, wherein the identification information indicates a network provider of a plurality of possible network providers;

determining a network provider for the portable computing device after receiving the identification information;

the first access point receiving data from the portable computing device in a wireless manner;

providing the data received from the portable computing device to a destination based on the determined network provider.

45. The method of claim 44, wherein the wireless network system is a distributed wireless network system.

46. A method for providing access to a wireless network system, wherein the wireless network system includes a plurality of access points coupled to a network, the method comprising:

a first access point receiving identification information from a portable computing device in a wireless manner, wherein the identification information indicates a network provider of a plurality of possible network providers;

determining a network provider for the portable computing device after receiving the identification information;

the first access point receiving data from the portable computing device in a wireless manner;

5 providing network access to the portable computing device through the determined network provider.

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46. A method for providing selective access to network resources in a distributed wireless network system, wherein the wireless network system includes a plurality of access points coupled to a network, the method comprising:

10 a first access point receiving identification information from a portable computing device;

determining an access level for the portable computing device after receiving the identification information;

15 the first access point receiving data from the portable computing device; and

providing the data received from the portable computing device to a destination based on the determined access level.

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47. The method of claim 46, wherein said providing the data comprises:

20 providing the data to one or more resources on the network to allow the portable computing device access to the one or more resources on the network if the access level is a first access level;

providing the data to a destination for external access out of the network to only allow the portable computing device access to other networks if the access level is a second access level;

25 wherein, if the access level is the second access level, the data is not provided to the one or more resources on the network.